

~~CLAIMS~~

1. A method of detecting the presence of an analyte of interest in a sample, the method comprising the steps of: providing a first surface having reversibly immobilised thereon a displaceable moiety; exposing the first surface to a sample comprising the analyte of interest, the analyte of interest specifically displacing the displaceable moiety from the first surface in an affinity-related manner; causing the displaceable moiety displaced from the first surface to contact a second surface bearing a capture moiety which specifically binds to the displaceable moiety, so as to capture the displaceable moiety on the second surface, said capture generating a detectable signal; and detecting the signal; wherein said detection is performed by means other than SPR, and wherein the displaceable moiety cannot generate the signal which is detected in the assay unless and until the displaceable moiety is captured on the second surface.

2. A method according to claim 1, wherein the displaceable moiety comprises an immunoglobulin molecule or an antigen-binding derivative thereof.

3. A method according to claim 1 or 2, wherein the displaceable moiety comprises a bispecific antibody or bispecific antigen-binding antibody derivatives.

4. A method according to any one of claims 1, 2 or 3, wherein the displaceable moiety comprises a portion which facilitates reversible immobilisation on the first surface.

5. A method according to any one of the preceding claims, wherein the displaceable moiety comprises a fusion protein.

6. A method according to any one of the preceding claims, wherein the displaceable moiety comprises a mimotope which is an analogue of the analyte of interest.

7. A method according to any one of the preceding claims, wherein the first surface comprises a plurality of intervening molecules which bind relatively loosely to the displaceable moiety, such that the binding affinity of the intervening moiety for the analyte

~~of interest is greater than that of the displaceable moiety for the intervening moiety~~

8. A method according to claim 1, wherein the intervening molecule is an analogue (e.g. mimotope) of the analyte of interest.

9. A method according to any one of the preceding claims, wherein the capture moiety comprises an immunoglobulin molecule or an antigen-binding variant thereof.

10. A method according to any one of the preceding claims, wherein the displaceable moiety and the capture moiety comprise the members of a specific binding pair.

11. A method according to any one of the preceding claims, wherein the detectable signal comprises the generation of, or the modulation of, an evanescent or acoustic wave.

12. A method according to any one of claims 1-10, wherein capture of the displaceable moiety by the capture moiety directly modulates the electrochemical properties of the capture moiety, which modulation comprises the detectable signal.

13. A method according to any one of the preceding claims, wherein the first and second surfaces are provided on separate respective first and second supports.

14. A method according to any one of claims 1-12, wherein the first and second surfaces are provided on a single support.

15. A method according to any one of the preceding claims, wherein the first and/or second surface is provided on a solid support which is planar, particulate or porous.

16. A method according to any one of the preceding claims, wherein the analyte of interest is selected from the group consisting of: steroid hormones, protein hormones, nucleic acids, peptides, bacterial or viral antigens, and immunoglobulins.

17. Apparatus for performing a method according to any one of the preceding claims, the

~~apparatus comprising: a first surface having reversibly immobilised thereon a displaceable moiety, wherein the displaceable moiety is displaced from the first surface in the presence of an analyte of interest; and a second surface bearing a capture moiety which specifically binds to the displaceable moiety;~~

18. Apparatus according to claim 17 further comprising one or more of the following: fluid conducting means; signal detection means for detecting a signal generated by capture of the displaceable moiety by the capture moiety; and data processing means.

19. Apparatus according to claim 17 or 18, comprising filter means provided between the first and second surfaces.

20. A method substantially as hereinbefore described and with reference to the accompanying drawings.

21. Apparatus substantially as hereinbefore described and with reference to the accompanying drawings.

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